

1     ABSTRACT OF THE DISCLOSURE

2             Plasma enhanced chemical vapor deposition (PECVD) reactors and  
3     methods of effecting the same are described. In accordance with a  
4     preferred implementation, a reaction chamber includes first and second  
5     electrodes operably associated therewith. A single RF power generator  
6     is connected to an RF power splitter which splits the RF power and  
7     applies the split power to both the first and second electrodes.  
8     Preferably, power which is applied to both electrodes is in accordance  
9     with a power ratio as between electrodes which is other than a 1:1  
10    ratio. In accordance with one preferred aspect, the reaction chamber  
11    comprises part of a parallel plate PECVD system. In accordance with  
12    another preferred aspect, the reaction chamber comprises part of an  
13    inductive coil PECVD system. The power ratio is preferably adjustable  
14    and can be varied. One manner of effecting a power ratio adjustment  
15    is to vary respective electrode surface areas. Another manner of  
16    effecting the adjustment is to provide a power splitter which enables the  
17    output power thereof to be varied. PECVD processing methods are  
18    described as well.

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